

# "WOW, WORKING WITH THESE KIDS REALLY IS WORTH IT!"

*Teri Abbott  
Sycamore High School  
Cincinnati, OH*

I had one of those unexpected occurrences last year that makes one sit back and say, "Wow, working with these kids really is worth it!" Let me set the stage: I had what we call a Life Skills Math Class. The type of student one finds in this class is the student who, for various reasons, has fallen behind in his or her math skills, but is not classified as LD or DH. These students work very hard, never pose a discipline problem, and are really very pleasant students to teach. They just have a hard time catching on to things at times.

The situation I'd like to share happened while we were in the middle of a measurement unit... more specifically, conversions between gallons, quarts, pints, and cups. We had spent a day in class filling various containers with water and seeing how many of each type went into the different containers. The students seemed to catch on fairly well, but the tough part is performing these conversions as pencil and paper exercises, not to mention going home and trying some of them on their own. I wasn't sure what to expect when we all returned to class the next day.

Well, what I found the next day still makes me get a catch in my throat when I talk about it. I asked the class how they thought they did on the assignment. The general response was "I think I did okay, but I'm not sure." One student, however, (let's just call him Joe) had a somewhat different response. Joe approached me with a little reservation and said that he thought he might have cheated but he felt he had completed the work correctly. Joe often had his mother help him with his homework, so I asked him if this is what he meant. He said no, it would probably be easier if he just showed me what he had done.

Joe's explanation went something like this: Well, I took a full piece of construction-like paper and I called it a gallon. Then I took another piece and cut it in half and called those two pieces half gallons. Then I took another piece of paper and cut it into four pieces and called these the quarts (and he continued his explanation through to cups). Then, to work the homework, I just laid the pieces down on top of each other to see how many would fit.

Then Joe said something like, "I hope you're not mad, but it really helped me to do it this way." Well, at this point, I guess you could say my jaw had dropped and quite a few things were going through my mind. For a brief moment I think I felt a little embarrassed that I, being the teacher, hadn't thought of this first! What a selfish thought, though, and I got rid of it fast. My first visible reaction was to give Joe a huge pat on the back and tell him how proud of him I was. I announced to the rest of the class that Joe had come up with what I felt was a better way to do these exercises than what I had given them the day before. If they'd give him their attention, I'd like them to follow his instructions. We proceeded to make our own sets of manipulatives and then spent the rest of the period discussing how some problems have many different ways to solve them and one should always be willing to try different approaches. Somewhere during that discussion another student suggested we cut out the pictures from our textbook of the gallons, quarts, pints, and cups to paste onto the papers to make them even easier to use. Of course, I didn't hesitate a moment to run to the copy machine and make copies of the pictures for pasting!

Well, as for Joe, he is at the vocational school now, where I hope he is taking the initiative to try new ways to solve problems. I sent in an "academic referral" on him last year which resulted in his being called to the principal's office to be congratulated for doing such a great thing in class that day. As for me, I choose that experience to go back to whenever I start getting down or negative about what I am going to do as a teacher. It wasn't necessarily an earth shattering event, but it sure helped remind me that I am there not only to teach my students, but I am there to learn from them, also.

---

"... a little reflection shows that the graph of  $f^{-1}$  is the mirror image... of the graph of  $f$ ."

Leonard Gillman and Robert McDonwell  
*Calculus*  
W.W. Norton, 1973